

June 23-27, 2013

## 50TH ANNIVERSARY MEETING

ASSOCIATION FOR TROPICAL BIOLOGY AND CONSERVATION  
& ORGANIZATION FOR TROPICAL STUDIES

## ATBC Online Web Program

## O33-4

## Understanding farmers: Using role playing games to explore futures of landscape management in the western Ghats (India)

Wednesday, 26 June 2013: 16:55

La Paz - C West (Herradura San Jose)

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Mainstreaming biodiversity conservation into production landscapes requires careful consideration of the drivers, needs and constraints of farmers. In many cases, deforestation and degradation are the rational choice, not the result of a lack of awareness or knowledge. Here we present a case study where we used an integrated approach to understand the management of coffee agroforestry system in the district of Kodagu (India). Previous research established that farmers in this biodiversity rich production landscape are slowly replacing the complex and diverse original canopy with *Grevillea robusta*, a fast growing species originating from Australia. This happens despite local knowledge highlighting the agronomical and multipurpose values of the original tree species and specific tenure systems and policies enforced by the Forest Department protecting them. An integrated, participatory modeling approach was developed to understand the drivers behind the described landscape transitions and to explore with the stakeholders the plausible livelihood and environmental impacts of a policy change once this was shown as critical. While the underlying ecological processes driving the system were modeled based on expert knowledge and published scientific literature, the actual elements of the system, the key actors and resources, and their interactions were defined together with the stakeholders. The conceptual model was transformed into a Role Playing Game and after validating the model we conducted 7 workshops (52 participants in total) with a No Change scenario as baseline where the policy framework remains unchanged, and a Restitution of Rights scenario where rights over the native trees are handed over to the farmers. The results show the transition into a *Grevillea robusta* dominated landscape will continue unless there is a change to the policy framework. However, the restitution of rights risks speeding up the process instead of reversing it, as other factors, such as the tree species differential growth speed, kick-in.

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## Meeting Information

## When:

June 23 - 27, 2013

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San Jose, Costa Rica



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